**PATENT APPLICATION**
**DOCKET NO. 200311036-1**

**IN THE**
**UNITED STATES PATENT AND TRADEMARK OFFICE**

**INVENTOR(S):** Jack Cassidy

**CONFIRMATION NO.:** 8478

**SERIAL NO.:** 10/620,505

**GROUP ART UNIT:** 2625

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**EXAMINER:** Dickerson, Chad S.

**SUBJECT:** ARRANGING IMAGES ON A PAGE

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THE COMMISSIONER OF PATENTS
ALEXANDRIA, VA 22313-1450

**APPELLANTS'/APPLICANTS' OPENING BRIEF ON APPEAL**

## 1. REAL PARTY IN INTEREST.

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holding, LLC.

## 2. RELATED APPEALS AND INTERFERENCES.

There are no other appeals or interferences known to Appellants, Appellants' legal representative or the Assignee which will affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## 3. STATUS OF CLAIMS.

The Examiner mistakenly asserts all of Claims 1-48 are pending. Instead, only Claims 3-6, 8-11, 15-20, 23-26, 28-31, 35-40, 43 and 46 are pending but stand rejected. Claims 1, 2, 7, 12-14, 21, 22, 27, 32-34, 41, 42, 44, 45, 47, and 48 have been cancelled. All rejected claims are appealed.

## 4. STATUS OF AMENDMENTS.

After the final office action was entered, Claims 23, 24, 26, and 31, paragraph [0043] and Fig. 7 were amended to correct non substantive errors. All other previous amendments have been entered.

## 5. SUMMARY OF CLAIMED SUBJECT MATTER.

Claim 3 is directed to a method for arranging digital images on a page. The method includes identifying a set of digital images and identifying a pre-determined print size for each of the digital images in the set. *See, e.g.,*

Specification, paragraph [0046], Fig. 5, step 64 and paragraph [0047], Fig. 6, steps 78 and 80. A packing area is defined. *See, e.g.*, Specification, paragraph [0049], Fig. 7, step 90. A largest of the pre-determined print sizes is identified. *See, e.g.*, Specification, paragraph [0050], Fig. 7, steps 94 and 98. If it will fit in the packing area, a digital image from the set having the identified largest pre-determined print size is packed in a first orientation in the packing area in a first trial pack. *See, e.g.*, Specification, paragraph [0052], Fig. 7, steps 100, 102 and 104. If it will fit in the packing area, the digital image from the set having the identified largest pre-determined print size is packed in a second orientation in the packing area in a second trial pack. *See, e.g.*, Specification, paragraph [0054], Fig. 7, steps 108, 110, and 112.

Claim 6 is directed to a method for generating trial packs from a set of digital images. Each digital image in the set has a pre-determined print size. *See, e.g.*, Specification, paragraph [0047], Fig. 6, steps 78 and 80. The method includes opening a trial pack as an empty page. *See, e.g.*, Specification, paragraph [0035]. If possible, each open trial pack is continued. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 84. Each trial pack that cannot be continued is closed. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 86. The acts of continuing and closing are repeated until no trial pack remains open. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 88.

The act of continuing includes, upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area, identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area. *See, e.g.*, Specification, paragraph [0050], Fig. 7, steps 94 and 98. If it will fit, a digital image of the identified largest pre-determined print size is packed in a first orientation and the open trial pack is continued as a first child trial pack. *See, e.g.*, Specification, paragraphs [0051]-[0053], Fig. 7, steps 100, 102 and 104. If it will fit, a digital image of the identified largest pre-determined print size is packed in a second

orientation and the trial pack is continued as a second child trial pack. *See, e.g.*, Specification, paragraph [0054], Fig. 7, steps 108, 110, and 112.

Claim 11 is directed to a method for arranging a set of digital images on a page. The method includes selecting a set of digital images. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 64. Each digital image in the set has a pre-determined print size. A trial pack is opened as an empty page. *See, e.g.*, Specification, paragraph [0047], Fig. 6, steps 78 and 80. If possible, each open trial pack is continued. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 84. Each trial pack that cannot be continued is closed. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 86. The steps of continuing and closing are repeated until no trial pack remains open. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 88. The closed trial packs are compared. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 68. A trial pack is selected based upon the comparison. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 70. It is determined if any of the digital images from the set were not used in the selected trial pack. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 72. If any digital images are determined to not be used, the unused digital images are selected as the set of digital images and the acts of opening, continuing, closing, comparing, selecting, and determining are repeated. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 74.

The act of continuing comprises defining a packing area. *See, e.g.*, Specification, paragraph [0049], Fig. 7, step 90. Upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area, a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area is identified. *See, e.g.*, Specification, paragraph [0050], Fig. 7, steps 94 and 98. If it will fit, a digital image of the identified pre-determined print size is packed in a first orientation and continuing the open trial pack as a first child trial pack. *See, e.g.*, Specification, paragraphs [0051]-[0053], Fig. 7, steps 100, 102 and 104. If it will fit, a digital image of the identified pre-determined print size is packed in a

second orientation and continuing the trial pack as a second child trial pack. . *See, e.g.*, Specification, paragraph [0054], Fig. 7, steps 108, 110, and 112.

Claim 23 recites a computer readable medium having computer executable instructions for implementing the method of Claim 3. That method includes identifying a set of digital images and identifying a pre-determined print size for each of the digital images in the set. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 64 and paragraph [0047], Fig. 6, steps 78 and 80. A packing area is defined. *See, e.g.*, Specification, paragraph [0049], Fig. 7, step 90. A largest of the pre-determined print sizes is identified. *See, e.g.*, Specification, paragraph [0050], Fig. 7, steps 94 and 98. If it will fit in the packing area, a digital image from the set having the identified largest pre-determined print size is packed in a first orientation in the packing area in a first trial pack. *See, e.g.*, Specification, paragraph [0052], Fig. 7, steps 100, 102 and 104. If it will fit in the packing area, the digital image from the set having the identified largest pre-determined print size is packed in a second orientation in the packing area in a second trial pack. *See, e.g.*, Specification, paragraph [0054], Fig. 7, steps 108, 110, and 112.

Claim 26 recites a computer readable medium having computer executable instructions for implementing the method of Claim 6. That method includes opening a trial pack as an empty page. *See, e.g.*, Specification, paragraph [0035]. If possible, each open trial pack is continued. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 84. Each trial pack that cannot be continued is closed. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 86. The acts of continuing and closing are repeated until no trial pack remains open. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 88.

The act of continuing includes, upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area, identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area. *See, e.g.*, Specification,

paragraph [0050], Fig. 7, steps 94 and 98. If it will fit, a digital image of the identified largest pre-determined print size is packed in a first orientation and the open trial pack is continued as a first child trial pack. *See, e.g.*, Specification, paragraphs [0051]-[0053], Fig. 7, steps 100, 102 and 104. If it will fit, a digital image of the identified largest pre-determined print size is packed in a second orientation and the trial pack is continued as a second child trial pack. *See, e.g.*, Specification, paragraph [0054], Fig. 7, steps 108, 110, and 112.

Claim 31 recites a computer readable medium having computer executable instructions for implementing the method of Claim 11. That method includes selecting a set of digital images. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 64. Each digital image in the set has a pre-determined print size. A trial pack is opened as an empty page. *See, e.g.*, Specification, paragraph [0047], Fig. 6, steps 78 and 80. If possible, each open trial pack is continued. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 84. Each trial pack that cannot be continued is closed. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 86. The steps of continuing and closing are repeated until no trial pack remains open. *See, e.g.*, Specification, paragraph [0048], Fig. 6, step 88. The closed trial packs are compared. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 68. A trial pack is selected based upon the comparison. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 70. It is determined if any of the digital images from the set were not used in the selected trial pack. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 72. If any digital images are determined to not be used, the unused digital images are selected as the set of digital images and the acts of opening, continuing, closing, comparing, selecting, and determining are repeated. *See, e.g.*, Specification, paragraph [0046], Fig. 5, step 74.

The act of continuing comprises defining a packing area. *See, e.g.*, Specification, paragraph [0049], Fig. 7, step 90. Upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area, a largest pre-determined print size of a digital image

remaining in the set that will fit in the packing area is identified. *See, e.g.*, Specification, paragraph [0050], Fig. 7, steps 94 and 98. If it will fit, a digital image of the identified pre-determined print size is packed in a first orientation and continuing the open trial pack as a first child trial pack. *See, e.g.*, Specification, paragraphs [0051]-[0053], Fig. 7, steps 100, 102 and 104. If it will fit, a digital image of the identified pre-determined print size is packed in a second orientation and continuing the trial pack as a second child trial pack. . *See, e.g.*, Specification, paragraph [0054], Fig. 7, steps 108, 110, and 112.

Claim 43 is directed to a system for arranging a set of digital images. The system includes a trial pack generator and a pack selector. *See, e.g.*, Specification, paragraph [0031], Fig. 3, blocks 31 and 32. The pack generator is operable to define packing areas and to open a trial pack as an empty page. *See, e.g.*, Specification, paragraphs [0032] and [0035]. Using a defined packing areas, the pack generator repeatedly continues, if possible, each open trial pack and closed each open trial pack that cannot be continued until no trial pack remains open. *See, e.g.*, Specification, paragraph [0048], Fig. 6, steps 84 and 86. The pack generator is operable to continue each open trial pack by identifying from the set a largest pre-determined print size of a digital image remaining in the set that will fit in a packing area. *See, e.g.*, Specification, paragraph [0050], Fig. 7, steps 94 and 98. If it will fit, the pack generator packs a digital image of the identified largest pre-determined print size in a first orientation in an packing area and continuing the open trial pack as a first child trial pack. *See, e.g.*, Specification, paragraphs [0051]-[0053], Fig. 7, steps 100, 102 and 104. If it will fit, the pack generator packs a digital image of the identified largest pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack. *See, e.g.*, Specification, paragraph [0054], Fig. 7, steps 108, 110, and 112.

The pack selector is operable to compare closed trial packs generated by the pack generator. *See, e.g.*, Specification, paragraph [0039]. The pack selector selects a trial pack based upon the comparison. *See, e.g.*, Specification,

paragraph [0039]. The pack selector directs pack generator to generate new trial packs for any digital images not used in a selected trial pack until all digital image from the set are used in one of one or more selected trial packs. *See, e.g.*, Specification, paragraph [0040].

## 6. GROUNDS FOR REJECTION TO BE REVIEWED.

A. Claims 23-26, 28-31, 35-40 stand rejected under §101 as being directed to non-statutory subject matter.

B. Claims 3-17, 23-26, 28-31, 35-37, 43, and 46 stand rejected under §102 as being anticipated by US Pub 200/0040375 to Simon.

C. Claims 18-20 and 38-40 stand rejected under §103 as being anticipated by US Pub 200/0040375 to Simon in view of various other references.

## 7. ARGUMENT.

### A. Ground For Rejection A – Claims 23-26, 28-31, 35-40 stand rejected under §101 as being directed to non-statutory subject matter.

**Claims 23, 26, and 31** were amended in a response mailed January 2, 2008 rendering the rejection moot.

### B. Ground For Rejection B – Claims 3-17, 23-26, 28-31, 35-37, 43, and 46 stand rejected under §102 as being anticipated by US Pub 200/0040375 to Simon.

**Claim 3** is directed to a method for arranging digital images on a page and recites the following.

1. identifying a set of digital images;

2. identifying a pre-determined print size for each of the digital images in the set;
3. defining a packing area;
4. identifying a largest of the pre-determined print sizes;
5. if it will fit in the packing area, packing a digital image from the set having the identified largest pre-determined print size in a first orientation in the packing area in a first trial pack; and
6. if it will fit in the packing area, packing the digital image from the set having the identified largest pre-determined print size in a second orientation in the packing area in a second trial pack.

In response to the office action mailed May 16, 2007, the Appellant explained that Simon does not teach or suggest identifying a pre-determined print size of the digital images in a set or identifying a largest of the pre-determined print sizes. It is initially noted that the Examiner appears to be misinterpreting the expression "print size." Print size as opposed to original image size refers to the size of the image when printed. For example, an original image size may be eight by ten but the print size could be four by six.

Attention is drawn to paragraph [0019] of the Specification which notes that a user, through a user interface, can identify "one or more digital images, the number of copies of each digital image to be printed, and ***the print size of each copy***" (emphasis added). This is an example of a user selecting or setting a print size for each of a set of images. In this example, once set by the user, the selected print sizes are "pre-determined print sizes" – in this case – pre-determined by the user. Identifying a pre-determined print sizes then refers to identifying the print sizes set by, in this example, the user.

Paragraph [0032] of the Specification describes a coordinator 34 that is "responsible for identifying or noting each discrete size shared by one or more of the selected digital images and the number of digital images that share each discrete size." The coordinator 34 is also "responsible for identifying the remaining digital images with the largest discrete size that will fit in a packing

area." As used, the expression "discrete size" refers to each unique pre-determined print size.

Addressing the act of "identifying a pre-determined print size for each of the digital images in the set," the Examiner asserts that Simon's images "have a pre-determined print size since these images where taken by different sources (i.e. digital camera or scanner) and these different sources defined the print size for the images and therefore." The Examiner is misconstruing the expression "pre-determined print size." The sizes noted by the Examiner are original sizes – not pre-determined print sizes. At best, Simon teaches some form of indirect identification of original image sizes. The print size is not determined until after the images are "normalized." See Simon, paragraph [0050].

With respect to the act of "identifying a largest of the pre-determined print sizes", the Examiner states:

> shown in the illustrated prior art image in figure 2 is a template with the identification of a pre-determined print size for each of the digital images to be used on the template. Since this template is used to identify pre-determined print sizes of the pictures to be used, this performs the above feature. When the system is using the method of automatically placing pictures in the layout, the system chooses, or identifies, a certain pre-determined size on the overall layout to place the picture on the layout to be printed. In the system, an image may be identified as being much larger or smaller than the rest of the images. The image that is much larger than the others is considered as the image with the largest pre-determined print size. This image is identified when it is chosen to be placed on the layout and the smallest dimension of the image may be normalized in order to create a spatial balance between itself and other images used in the system; see figs. 1-3; paragraphs [0046]-[0055].

Nothing in Simon, paragraphs [0046]-[0055] even hints at identifying the largest of the identified pre-determined print sizes. As discussed, Simon discusses the selection of a set of images having various original sizes. One such image may be larger than the others. Contrary to the Examiner's assertion, the selection and placement of that image is not the same as "identifying a

largest of the pre-determined print sizes." Furthermore, the largest print size cannot be determined until after the images are "normalized." *See* Simon, paragraph [0050].

Consequently, Simon fails to teach or suggest a method that includes identifying a pre-determined print size for each of the digital images in the set and identifying a largest of the pre-determined print sizes. For at least this reason, Claim 3 and Claims 4 and 5 which depend from Claim 3, are patentable over Simon.

**Claim 6** is directed to a method for generating trial packs from a set of digital images, each digital image in the set having a pre-determined print size. Claim 6 recites the following:

1. opening a trial pack as an empty page;
2. continuing, if possible, each open trial pack and closing each trial pack that cannot be continued; and
3. repeating the continuing and closing until no trial pack remains open;
4. wherein continuing, comprises, upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area:
    a. identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area;
    b. if it will fit, packing a digital image of the identified largest pre-determined print size in a first orientation and continuing the open trial pack as a first child trial pack; and
    c. if it will fit, packing a digital image of the identified largest pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack.

Claim 6 recites that the act of continuing includes identifying a largest pre-

determined print size of a digital image remaining in the set that will fit in the packing area. As noted with respect to Claim 3, Simon fails to teach or suggest identifying a largest pre-determined print size. The selection and placement of that image is not the same as "identifying a largest of the pre-determined print sizes." Furthermore, the largest print size cannot be determined until after the images are "normalized." See Simon, paragraph [0050].

Consequently, Simon fails to teach or suggest a system that includes identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area. For at least this reason, Claim 6 and Claims 8-10 which depend from Claim 6 are patentable over Simon.

**Claim 11** is directed to a method for arranging a set of digital images on a page and recites the following.

1. selecting a set of digital image, each digital image in the set having a pre-determined print size;
2. opening a trial pack as an empty page;
3. continuing, if possible, each open trial pack and closing each trial pack that cannot be continued; and
4. repeating the steps of continuing and closing until no trial pack remains open;
5. comparing the closed trial packs;
6. selecting a trial pack based upon the comparison; and
7. determining if any of the digital images from the set were not used in the selected trial pack, and if any digital images are determined to not be used, selecting the unused digital images as the set of digital images and repeating the, opening, continuing, closing, comparing, selecting, and determining;
8. wherein continuing comprises defining a packing area and upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area:

a. identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area;
b. if it will fit, packing a digital image of the identified pre-determined print size in a first orientation and continuing the open trial pack as a first child trial pack; and
c. if it will fit, packing a digital image of the identified pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack.

Claim 11 recites that t each digital image in a selected set has a pre-determined print size. As explained with respect to Claim 3, Simon, at best, teaches some form of indirect identification of original image sizes. The print is not pre-determined because the print size is not known until after the images are "normalized." See Simon, paragraph [0050].

Claim 11 also recites identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area. As noted with respect to Claim 3, Simon fails to teach or suggest identifying a largest pre-determined print size. The selection and placement of that image is not the same as "identifying a largest of the pre-determined print sizes." Furthermore, the largest print size cannot be determined until after the images are "normalized." See Simon, paragraph [0050].

Consequently, Simon fails to teach or suggest a method that includes selecting a set of digital image, each digital image in the set having a pre-determined print size and identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area. For at least this reason, Claim 11 and Claims 15-20 which depend from claim 11 are patentable over Simon.

**Claim 23** is directed to a computer readable medium having computer executable instructions for implementing the method of Claim 3. For at least the same reasons Claim 3 is patentable, so are Claims 23 and Claims 24 and 25

which depend from Claim 23.

**Claim 26** is directed to a computer readable medium having computer executable instructions for implementing the method of Claim 6. For at least the same reasons Claim 6 is patentable, so are Claims 26 and Claims 28-30 which depend from Claim 26.

**Claim 31** is directed to a computer readable medium having computer executable instructions for implementing the method of Claim 11. For at least the same reasons Claim 11 is patentable, so are Claims 31 and Claims 35-40 which depend from Claim 31.

**Claim 43** is directed to a system for arranging a set of digital images, comprising: a trial pack generator and a pack selector. Claim 43 recites the following:

1. the pack generator is operable to:
    a. define packing areas;
    b. to open a trial pack as an empty page
    c. using a defined packing areas, to repeatedly continue, if possible, each open trial pack and to close each open trial pack that cannot be continued until no trial pack remains open;
    d. wherein the pack generator is operable to continue each open trial pack by identifying from the set a largest pre-determined print size of a digital image remaining in the set that will fit in a packing area, if it will fit, packing a digital image of the identified largest pre-determined print size in a first orientation in an packing area and continuing the open trial pack as a first child trial pack, and, if it will fit, packing a digital image of the identified largest pre-determined print

size in a second orientation and continuing the trial pack as a second child trial pack;

2. the pack selector is operable to compare closed trial packs generated by the pack generator, to select a trial pack based upon the comparison; and, until all digital image from the set are used in one of one or more selected trial packs, to direct pack generator to generate new trial packs for any digital images not used in a selected trial pack.

Claim 43 recites that the pack generator is operable to continue an open trial pack by identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area. As noted with respect to Claim 3, Simon fails to teach or suggest identifying a largest pre-determined print size. The selection and placement of that image is not the same as "identifying a largest of the pre-determined print sizes." Furthermore, the largest print size cannot be determined until after the images are "normalized." *See* Simon, paragraph [0050].

Consequently, Simon fails to teach or pack generator that is operable to includes identify a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area. For at least this reason, Claim 43 and Claim 46 which depends from Claim 43 are patentable over Simon.

**C. Ground For Rejection C – Claims 18-20 and 38-40 stand rejected under §103 as being anticipated by US Pub 200/0040375 to Simon in view of various other references.**

The Examiner has rejected Claims 18-20 and 38-40 under §103 as being anticipated by US Pub 200/0040375 to Simon in view of various other references. Each of these claims depends from a patentable base claim and, for the reasons stated above, are also patentable over the cited references.

**Conclusion:**

Claims 3-6, 8-11, 15-20, 23-26, 28-31, 35-40, 43 and 46 are felt to be in condition for allowance. Consequently, early and favorable action reversing the Examiner's rejections, allowing these claims, and passing the application to issue is earnestly solicited.

Respectfully submitted,
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## APPENDIX OF CLAIMS INVOLVED IN THE APPEAL

1. (cancelled)

2. (cancelled)

3. (previously presented) A method for arranging digital images on a page, comprising:

identifying a set of digital images;

identifying a pre-determined print size for each of the digital images in the set;

defining a packing area;

identifying a largest of the pre-determined print sizes;

if it will fit in the packing area, packing a digital image from the set having the identified largest pre-determined print size in a first orientation in the packing area in a first trial pack; and

if it will fit in the packing area, packing the digital image from the set having the identified largest pre-determined print size in a second orientation in the packing area in a second trial pack.

4. (previously presented) The method of Claim 3,

wherein packing the digital image in the first orientation includes, if the digital image from the set having the identified largest pre-determined print size will fit in the first orientation, packing as many digital images from the set having the identified largest pre-determined print size as possible in the packing area in the first trial pack; and

wherein packing the digital image in the second orientation includes, if the digital image from the set having the identified largest pre-determined print size will fit in the second orientation, packing as many digital images from the set

having the identified largest pre-determined print size as possible in the second orientation in the second trial pack.

5. (previously presented) The method of Claim 4, wherein:

identifying a largest of the pre-determined print sizes, comprises identifying, from a set of digital images, a largest pre-determined print size that will fit in the packing area; and

packing as many digital images of the identified largest pre-determined print size as possible comprises repeatedly packing digital images of the identified largest pre-determined print size in a given orientation until either another digital image of the identified largest pre-determined print size will not fit or no digital image of the identified largest pre-determined print size remains in the set.

6. (previously presented) A method for generating trial packs from a set of digital images, each digital image in the set having a pre-determined print size, the method comprising

opening a trial pack as an empty page;

continuing, if possible, each open trial pack and closing each trial pack that cannot be continued; and

repeating the continuing and closing until no trial pack remains open;

wherein continuing, comprises, upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area:

identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area;

if it will fit, packing a digital image of the identified largest pre-determined print size in a first orientation and continuing the open trial pack as a first child trial pack; and

if it will fit, packing a digital image of the identified largest pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack.

7. (cancelled)

8. (previously presented) The method of Claim 6, wherein:

packing the digital image of the identified largest pre-determined print-size in the first orientation comprises packing as many digital images of the identified largest pre-determined print size as possible in the first orientation and continuing the open trial pack as a first child trial pack; and

packing the digital image of the identified largest pre-determined print-size in the second orientation comprises packing as many digital images of the identified largest pre-determined print size as possible in the second orientation and continuing the open trial pack as a second child trial pack.

9. (previously presented) The method of Claim 8, wherein packing as many digital images of the identified largest pre-determined print size as possible comprises repeatedly packing digital images of the identified largest pre-determined print size in a given orientation until either another digital image of the identified largest pre-determined print size will not fit or no digital image of the identified largest pre-determined print size remains in the set.

10. (previously presented) The method of Claim 6, wherein closing comprises, for each open trial pack, closing that pack if no digital image from the set that has yet to be packed in the open trial pack will fit in the packing area.

11. (previously presented) A method for arranging a set of digital images on a page, comprising:

selecting a set of digital image, each digital image in the set having a pre-determined print size;

opening a trial pack as an empty page;

continuing, if possible, each open trial pack and closing each trial pack that cannot be continued; and

repeating the steps of continuing and closing until no trial pack remains open;

comparing the closed trial packs;

selecting a trial pack based upon the comparison; and

determining if any of the digital images from the set were not used in the selected trial pack, and if any digital images are determined to not be used, selecting the unused digital images as the set of digital images and repeating the, opening, continuing, closing, comparing, selecting, and determining;

wherein continuing comprises defining a packing area and upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area:

identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area;

if it will fit, packing a digital image of the identified pre-determined print size in a first orientation and continuing the open trial pack as a first child trial pack; and

if it will fit, packing a digital image of the identified pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack.

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (previously presented) The method of Claim 11, wherein:

packing the digital image of the identified largest pre-determined print size in the first orientation comprises packing as many digital images of the identified pre-determined print size as possible in the first orientation and continuing the open trial pack as a first child trial pack; and

packing the digital image of the identified largest pre-determined print size in the second orientation comprises packing as many digital images of the identified pre-determined print size as possible in the second orientation and continuing the open trial pack as a second child trial pack.

16. (previously presented) The method of Claim 15, wherein packing as many digital images of the identified pre-determined print size as possible comprises repeatedly packing digital images of the identified pre-determined print size in a given orientation until either another digital image of the identified pre-determined print size will not fit or no digital image of the identified pre-determined print size remains in the set.

17. (previously presented) The method of Claim 11, wherein closing comprises, for each open trial pack, closing that pack if no digital image from the set that has yet to be packed in the open trial pack will fit in the packing area.

18. (previously presented) The method of Claim 11, wherein defining a packing area comprises identifying a geometry of a packed space and defining a packing area according the geometry of the packed space.

19. (previously presented) The method of Claim 11, wherein defining a packing area comprises identifying a packed space as rectangular, identifying left over spaces located diagonally, vertically, and horizontally relative to the packed space, combining the diagonal space with either the vertical space or the horizontal space creating a combined space having a maximized small dimension, and defining a first packing area as the combined space and defining a second packing area as the remaining horizontal or vertical space.

20. (previously presented) The method of Claim 11, wherein identifying a packing area comprises identifying a packed space as irregular, maximizing a jagged space, identifying remaining spaces that are located vertically and horizontally relative to the packed space, defining a first packing area as the maximized jagged space, defining a second packing area as the left over vertical space, and defining a third packing are as the left over horizontal space.

21. (cancelled)

22. (cancelled)

23. (previously presented) A computer readable medium having instructions for:

identifying a set of digital images;

identifying a pre-determined print size for each of the digital images in the set;

defining a packing area;

identifying a largest of the pre-determined print sizes;

if it will fit in the packing area, packing a digital image from the set having the identified largest pre-determined print size in a first orientation in the packing area in a first trial pack; and

if it will fit in the packing area, packing the digital image from the set having the identified largest pre-determined print size in a second orientation in the packing area in a second trial pack.

24. (previously presented) The medium of Claim 23,

wherein the instructions for packing the digital image in the first orientation include instructions for, if the digital image from the set having the identified largest pre-determined print size will fit in the first orientation, packing as many

digital images from the set having the identified largest pre-determined print size as possible in the packing area in the first trial pack; and

wherein the instructions for packing the digital image in the second orientation include instructions for, if the digital image from the set having the identified largest pre-determined print size will fit in the second orientation, packing as many digital images from the set having the identified largest pre-determined print size as possible in the second orientation in the second trial pack.

25. (previously presented) The medium of Claim 24, wherein the instructions for:

identifying a largest of the pre-determined print sizes, comprises instructions for identifying, from a set of digital images, a largest pre-determined print size that will fit in the packing area; and

packing as many digital images of the identified largest pre-determined print size as possible comprises instructions for repeatedly packing digital images of the identified largest pre-determined print size in a given orientation until either another digital image of the identified largest pre-determined print size will not fit or no digital image of the identified largest pre-determined print size remains in the set.

26. (previously presented) A computer readable medium having computer executable instructions for:

selecting a set of digital images, each digital image in the set having a pre-determined print size;

opening a trial pack as an empty page;

continuing, if possible, each open trial pack and closing each trial pack that cannot be continued; and

repeating the continuing and closing until no trial pack remains open;

wherein the instructions for continuing include instructions for, upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area:

identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area;

if it will fit, packing a digital image of the identified largest pre-determined print size in a first orientation and continuing the open trial pack as a first child trial pack; and

if it will fit, packing a digital image of the identified largest pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack.

27. (cancelled)

28. (previously presented) The medium of Claim 26, wherein the instructions for:

packing the digital image of the identified largest pre-determined print-size in the first orientation include instructions for packing as many digital images of the identified largest pre-determined print size as possible in the first orientation and continuing the open trial pack as a first child trial pack; and

packing the digital image of the identified largest pre-determined print-size in the second orientation include instructions for packing as many digital images of the identified largest pre-determined print size as possible in the second orientation and continuing the open trial pack as a second child trial pack.

29. (previously presented) The medium of Claim 28, wherein the instructions for packing as many digital images of the identified largest pre-determined print size as possible include instructions for repeatedly packing digital images of the identified largest pre-determined print size in a given orientation until either another digital image of the identified largest pre-

determined print size will not fit or no digital image of the identified largest pre-determined print size remains in the set.

30. (previously presented) The medium of Claim 26, wherein the instructions for closing include instructions for, for each open trial pack, closing that pack if no digital image from the set that has yet to be packed in the open trial pack will fit in the packing area.

31. (previously presented) A computer readable medium having computer executable instructions for

selecting a set of digital image, each digital image in the set having a pre-determined print size;

opening a trial pack as an empty page;

continuing, if possible, each open trial pack and closing each trial pack that cannot be continued; and

repeating the steps of continuing and closing until no trial pack remains open;

comparing the closed trial packs;

selecting a trial pack based upon the comparison; and

determining if any of the digital images from the set were not used in the selected trial pack, and if any digital images are determined to not be used, selecting the unused digital images as the set of digital images and repeating the, opening, continuing, closing, comparing, selecting, and determining;

wherein the instructions for continuing include instructions for defining a packing area and upon determining that at least one digital image from the set that has yet to be packed in the open trial pack will fit in the packing area:

identifying a largest pre-determined print size of a digital image remaining in the set that will fit in the packing area;

if it will fit, packing a digital image of the identified pre-determined print size in a first orientation and continuing the open trial pack as a first child trial pack; and

if it will fit, packing a digital image of the identified pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack.

32. (cancelled)

33. (cancelled)

34. (cancelled)

35. (previously presented) The medium of Claim 31, wherein:

the instructions for packing the digital image of the identified largest pre-determined print size in the first orientation include instructions for packing as many digital images of the identified pre-determined print size as possible in the first orientation and continuing the open trial pack as a first child trial pack; and

the instructions for packing the digital image of the identified largest pre-determined print size in the second orientation include instructions for packing as many digital images of the identified pre-determined print size as possible in the second orientation and continuing the open trial pack as a second child trial pack.

36. (previously presented) The medium of Claim 35, wherein the instructions for packing as many digital images of the identified pre-determined print size as possible include instructions for repeatedly packing digital images of the identified pre-determined print size in a given orientation until either another digital image of the identified pre-determined print size will not fit or no digital image of the identified pre-determined print size remains in the set.

37. (previously presented) The medium of Claim 31, wherein the instructions for closing include instructions for, for each open trial pack, closing that pack if no digital image from the set that has yet to be packed in the open trial pack will fit in the packing area.

38. (previously presented) The medium of Claim 31, wherein the instructions for defining a packing area include instructions for identifying a geometry of a packed space and defining a packing area according the geometry of the packed space.

39. (previously presented) The medium of Claim 31, wherein the instructions for defining a packing area include instructions for identifying a packed space as rectangular, identifying left over spaces located diagonally, vertically, and horizontally relative to the packed space, combining the diagonal space with either the vertical space or the horizontal space creating a combined space a maximized small dimension, and defining a first packing area as the combined space and defining a second packing area as the remaining horizontal or vertical space.

40. (previously presented) The medium of Claim 31, wherein the instructions for defining a packing area include instructions for identifying a packed space as irregular, maximizing a jagged space, identifying remaining spaces that are located vertically and horizontally relative to the packed space, defining a first packing area as the maximized jagged space, defining a second packing area as the left over vertical space, and defining a third packing are as the left over horizontal space.

41. (cancelled)

42. (cancelled)

43. (previously presented) A system for arranging a set of digital images, comprising: a trial pack generator and a pack selector, wherein:

the pack generator is operable to:

define packing areas;

to open a trial pack as an empty page

using a defined packing areas, to repeatedly continue, if possible, each open trial pack and to close each open trial pack that cannot be continued until no trial pack remains open;

wherein the pack generator is operable to continue each open trial pack by identifying from the set a largest pre-determined print size of a digital image remaining in the set that will fit in a packing area, if it will fit, packing a digital image of the identified largest pre-determined print size in a first orientation in an packing area and continuing the open trial pack as a first child trial pack, and, if it will fit, packing a digital image of the identified largest pre-determined print size in a second orientation and continuing the trial pack as a second child trial pack;

the pack selector is operable to compare closed trial packs generated by the pack generator, to select a trial pack based upon the comparison; and, until all digital image from the set are used in one of one or more selected trial packs, to direct pack generator to generate new trial packs for any digital images not used in a selected trial pack.

44. (cancelled)

45. (cancelled)

46. (previously presented) The system of Claim 43, wherein the packager is operable to, for each open trial pack, close that trial pack if no digital image from the set that has yet to be packed in the open trial pack will fit in the packing area.

47. (cancelled)

48. (cancelled)

## Evidence Appendix

There is no extrinsic evidence to be considered in this Appeal. Therefore, no evidence is presented in this Appendix.

## Related Proceedings Appendix

There are no related proceedings to be considered in this Appeal. Therefore, no such proceedings are identified in this Appendix.